INTEL CORPORATION
3065 Bowers Avenue
Santa Clara, California 95051
(408) 987-8080
TWX - 910 338 0026 TELEX - 34-6372

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

May 24, 1985

Mr. Harry Seraydarian
Director, Toxics and Waste Management Division
U.S. Environmental Protection Agency - Region IX
215 Fremont Street
San Francisco, California 94105

SUBJECT: INTEL RESPONSE TO RCRA 3007(a)/CERCLA 104(e) REQUEST DATED 4/23/85 AND RECEIVED BY INTEL 04/26/85 - EPA REFERENCE T-4-4

Dear Mr. Seraydarian:

Intel Corporation (Intel) is in receipt of the above captioned document (see Attachment 1). Intel has reviewed this request, assembled the information, and respectfully submits the attached and enclosed information in satisfaction of this request within the requested 30 day suspense date. As stated in Intel's letter of April 30, 1985, the request from the U.S. Environmental Protection Agency (EPA) Region IX refers to the Intel facility at 365 East Middlefield Road in Mountain View, California (see Attachment 2).

Intel initiated the lease of an existing building at the following address in July 1968:

365 East Middlefield Road
Mountain View, California 94042

Prior to lease occupancy by Intel, the building was leased by Union Carbide Corporation. From July 1968 through the end of 1968, Intel partially occupied the building, and there were no production activities. Production activities initiated in 1969 and continued through 1981. The activities during this period centered on the development and production of semiconductor wafer fabrication. The underground vault and tank for collection of waste solvents from this production activity was installed in January of 1973.

The facility was not used for production activities from the end of 1980 through June of 1983. From January 1981 through May 1981, laboratory scale operations were continued which were totally phased out in May 1981. From June 1983 to June of 1984, the facility was used for wafer sort and calibration/electrical testing. All activities at this location have been terminated since June of 1984 with the exception of the contract support people for the implementation of Intel's mitigation plan. This plan was submitted to RWQCB and DOHS in September 1984 and approved by both agencies.

The remainder of this letter addresses the nine specific items set forth in the above captioned request. Each is addressed in the same order as in your request.

1. Description of hazardous substances - Attachment 3 presents the list of hazardous substances which have been used at this facility. This list has been prepared using chemical rather than trade names where appropriate.

2. List of hazardous substances/wastes - Attachment 4 presents a summary of chemical usage at Intel Mountain View for the years 1975, 1978, April through December 1979, and June 1983 through June 1984. Intel record retention policy has not considered chemical usage data and material transfer orders to require permanent retention. All records were retained for a maximum of one year and then destroyed. With the exception of the records presented in Attachment 4, all other information has been destroyed and cannot be reproduced.

   The disposition and containment of waste products from the manufacturing operation are summarized in Attachment 5.

3. List of personnel - Attachment 6 presents the list of personnel associated with the site who may possess knowledge and/or information relative to this inquiry.

4-7. Information concerning releases, description of groundwater monitoring system and appropriate reports - Enclosed with this submittal is a copy of the reports which describe the information requested in Items 4 through 7. The following presents a list of the title, date, and consultant author of these reports:

TITLE	DATE	CONSULTANT/AUTHOR
Soil and Groundwater Contamination Study	11/81	Emcon Associates
Final Report of one study, geologic and hydrogeologic investigation of Intel plant, Mountain View	01/7/82	Woodward-Clyde
Hydrogeological Study at the Intel site, Mountain View, CA	06/15/82	Woodward-Clyde
Intel Mitigation Plan - Project #WC86-1461	11/83	D'Appolonia
Evaluation of Selected Mitigation Alternatives	07/84	IT Corporation
Soil and Groundwater Contamination Investigation	10/09/84	Weiss Associates

8. Insurance policies - Intel Corporation was formed in 1968. Attachment 7 presents a 29-page computer print-out which summarizes the over 170 insurance policies which are applicable to environmental coverage. The computer print-out presents the policy type, effective dates, insurance company, policy number and type of coverage.

9. Documentation on waste handling and disposal - Attachment 8 presents manifests and permits on waste handling and disposal which Intel has on record.

The current owner of this facility is the following:

Ray Handley, Managing Partner
Renault and Handley
2500 El Camino Real
Palo Alto, California 94306

(415) 321-3040

Prior to leasing this facility in July of 1968, Union Carbide Corporation occupied the building as a lessee. The building was originally constructed in 1965. It is Intel's understanding that the building was used by Union Carbide Corporation for semiconductor manufacturing, and Union Carbide could have used similar chemical processes.

Intel believes this submittal to be true and accurate. This submittal fulfills the requirements set forth in EPA Region IX's request. If you should have any questions regarding the contents of this submittal, please do not hesitate to contact me at (602) 869-4812.

Sincerely,

Terrence J. McManus/ch

Terrence J. McManus, P.E.
Manager, Corporate Environmental Affairs

TM:df

CC: L. Borgman, Intel

ATTACHMENT 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

23 APR 1985

In Reply
Refer To: T-4-4

Terrence J. McManus
Manager
Corporate Environmental Affairs
Intel Corporation
Santa Clara, CA 95051

RECEIVED
APR 26 1985
FACILITIES ENGINEERING

Dear Mr. McManus:

The Environmental Protection Agency (EPA) is conducting an investigation of soil and groundwater contamination resulting from releases or threatened releases of hazardous wastes and/or substances at the Intel Corporation in Santa Clara, California. The purpose of the investigation is to determine the nature, cause and extent of releases of hazardous contaminants in the area, to assess the effects of any contamination on the environment and public health, to determine the exact details and evaluate the adequacy of any remedial actions that have been planned or initiated to date, and to determine what future response actions are needed to abate the release of such wastes or substances to the environment.

As part of this investigation, EPA needs historical and present information which has been generated or obtained by persons that have been involved with the site. EPA has reason to believe that Intel Corporation may be in possession of needed information. Therefore, pursuant to Section 3007 (a) of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. Section 6927 and Section 104 (e) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. Section 9604 (e), I request that you provide the following information within thirty (30) days of receipt of this letter:

1. A detailed description of all hazardous substances used in production related processes at these facilities during all years of operation.

2. A list of all hazardous substances and hazardous wastes that were generated at this site including but not limited to chlorinated solvents. This list should include the nature of the hazardous substances and hazardous wastes (specify their names, compositions, and sources and/or origin), the

quantities of hazardous substances and hazardous wastes (liquid wastes should be reported in terms of volume and solid wastes in terms of weight), and how the hazardous substances and hazardous wastes were contained (e.g. drums, bulk solids, tanks, etc.).

3. A list of all employees, agents, contractors, consultants, company officers, and other personnel who were associated with the site who may possess knowledge or information relevant to this inquiry. This list should include each individuals' name, address, telephone number and job title or function, or relationship to Intel Corporation.

4. All information concerning any releases, leaks or spills of hazardous substances or wastes on-site from underground storage tanks, leach pits, ponds, lagoons, or any other locations.

5. Locations and detailed descriptions of all monitoring wells, supply wells, injection wells, and underground tanks on-site and off-site.

6. All analyses from the sampling of any monitoring or supply wells on-site or off-site from your facility.

7. Copies of all reports, including but not limited to hydrogeologic, and engineering reports, regarding: a) the areal and vertical extent of ground water and soil contamination onsite and offsite from your facility; and (b) contemplated or implemented remedial alternatives onsite or offsite from your facility. Also include a list and description of all studies whether completed or not. Include all data generated to date, including any and all interpretive data.

8. A descriptive list of all insurance policies held by Intel Corporation that were in force at any time from 1965 to the present. The description of policies should include the dates during which the policy was in force, the general type of policy (e.g. comprehensive, general liability, automobile) and the insurance company issuing the policy, policy number, and any specific provisions of the policy regarding claims for environmental damages. Additionally, please provide a copy of all of these insurance policies, including any amendments, endorsements, riders, or other such attachments to the main policy document.

9. All information and copies of all documents which concern, refer, or relate to hazardous substances and hazardous wastes transported to or stored, treated, disposed of, or otherwise handled at Intel Corporation.

Include information regarding former owners/lessees of the site and their hazardous substances/waste practices.

The scope of this request extends to all information and documents independently developed or obtained by research on the part of your company, its employees, agents, consultants, or attorneys and any of the attorney's agents, consultants, or employees. The word "documents" mean any written, recorded, or visually, or aurally reproduced material of any kind in any medium in your possession, custody, or control or known by you to exist and includes originals, all prior drafts, and all non-identical copies.

Section 3007 (a) of RCRA provides that "...any person who generates, stores, treats, transports, disposes of, or otherwise handles or has handled hazardous wastes shall, upon request of any officer, employee or representative of the U.S. Environmental Protection Agency...furnish information relating to such wastes...." Section 104(e) of CERCLA provides that EPA may request information and records relating to hazardous substances from "...any person who stores, treats, or disposes of, or, where necessary to ascertain facts not available at the facility where such hazardous substances are located, who generates, transports, or otherwise handles or has handled, hazardous substances...." Failure to comply with this request subjects you and your company to compliance orders, civil actions and penalties.

The words "hazardous substances" hazardous waste" and "person" are defined at 42 U.S.C. Section 9601(14), 42 U.S.C. Section 6903(5) and 42 U.S.C. Section 6903(15) of CERCLA.

You may assert a business confidentiality claim covering all or part of the information requested by this letter, as provided at 40 C.F.R. Section 2.203 (b). Information covered by such a claim will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 C.F.R. Part 2, Subpart B, 41 F.R. §36902, Sept. 1, 1976, as amended at 43 F.R. §40000, Sept. 8, 1978. EPA will construe the failure to furnish a confidentiality claim with your response to this letter as a waiver of that claim, and information may be made available to the public by EPA without further notice to you.

You must respond to this request by letter, signed by you or a duly authorized official, submitted to the following office within thirty (30) days of your receipt of this letter.

Harry Seraydarian
United States Environmental Protection Agency
Region IX (T-1)
215 Fremont Street
San Francisco, CA 94105

If you need further information concerning technical issues please contact Glenn Kistner of my staff at (415) 974-7524. John Rothman can be reached at (415) 974-7453 for information concerning legal issues.

I appreciate your cooperation in this matter.

Sincerely,

Harry Seraydarian
Director
Toxics and Waste Management Division

cc: Roger James
Executive Director
California Regional Water Quality Control Board

Dwight Hoenig
Chief, North Coast Region
DOHS

Steve Brooks, R.S.
HAZMAT Program Coordinator
Santa Clara County DOPH

John O'Halloran
General Manager
Santa Clara Valley Water District

ATTACHMENT 2

Clarification letter from Intel to

EPA Region IX dated April 30, 1985

INTEL CORPORATION
2402 W. Beardsley Road
Phoenix, Arizona 85027
(602) 869-3805

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

April 30, 1985

Mr. Glenn Kistner
Toxic Waste Management Division
U.S. Environmental Protection Agency
Region IX
215 Fremont Street
San Francisco, CA 94105

SUBJECT: Section 3007 (a) Letter EPA Reference T-4-4
Dated April 23, 1985 and Received by Intel April 26

Dear Mr. Kistner:

Per our telephone conversation of April 29, 1985 Intel Corporation has received the above referenced letter. This letter requires Intel to provide information for its Mountain View facility which is located at the following address:

Intel Corporation
365 East Middlefield Road
Mountain View, CA 94042

It is Intel's understanding that U.S. Environmental Protection Agency Region IX is only requesting information regarding the above facility. Intel will proceed with preparing this information and forward it to EPA by Monday, May 27, 1985.

Thank you for your cooperation in this matter.

Sincerely,

Terrence J. McManus, P.E.
Manager, Corporate Environmental Affairs

CC: H. Seraydarian, U.S. EPA
R. James, RWQCB
D. Hoenig, DOHS
S. Brooks, Santa Clara County DOPH
J. O'Halloran, SCVWD
L. Johnson, Intel
L. Borgman, Intel

ATTACHMENT 3

Description of hazardous substances used

at Intel Mountain View

----< PRP/Facility Information >----

PRP Name: Intel Corporation
Facility: 365 E. Middlefield Road
PRP Is/Was: Occupant From: 07/01/68 To: 06/01/84

----< Correspondence Information >----

Letter Type	Letter Sent	Letter Received	Response Due	Response Sent
104(e) Information:	04/23/85	04/26/85	05/26/85	05/24/85
General Notice:	---	---	---	---
104(e) Followup:	---	---	---	---
Special Notice:	---	---	---	---

----< Response Summary >----

Chemicals Used	Y/N/NI	Dates Used	Amount	Unit
TCE:	Yes	01/01/69-06/01/79	1,246.00	GALLONS
TCA:	Yes	06/01/79-01/01/81	55.00	GALLONS
Freon:	Yes	? ~~? last~~ 01/01/81	?	?

Additional Information	Y/N/NI	Document No.
Spills:	No	2807 - 00238
Site Plan:	No	2807 - 00238
Tank Information:	Yes	2807 - 00238

Comments: THE CHEMICAL AMOUNTS INDICATED ABOVE ARE FOR THE YEARS 1975,1978, 1979, AND JUNE 1983 THROUGH JUNE 1984. THE BUILDING WAS LEASED BY UNION CARBIDE PRIOR TO OCCUPANCY BY INTEL.

------< Mailing Address Information >-------

PRP: Intel Corporation
ADDRESS: 3065 Bowers Avenue
CITY/STATE/ZIP: Santa Clara CA 95051

CONTACT: Terence J. McManus, P.E.
COMPANY: Intel Corporation
ADDRESS: 2402 W. Beardsley Road
CITY/STATE/ZIP: Phoenix AZ 85027
PHONE: (602)869-4812

ATTORNEY: Not Indicated

OTHER CHEMICALS
1,2,4-TRICHLOROBENZENE
ACETONE
ARSENIC
XYLENE(S)

NEED TO SEE 104(e) RESPONSE FOR FREON

DESCRIPTION OF HAZARDOUS SUBSTANCES USED AT INTEL MOUNTAIN VIEW

CHEMICAL USAGE PRE-1981

Solvents:

- 1,1,1-trichloroethane (June 1979 to 1981)*
- trichloroethylene (1969 to 1979)
- isopropanol
- xylene
- n-butyl acetate
- acetone
- isodecane (Hunt or Romic developer)
- ethylene glycol
- freon TF
- methanol
- cellosolve acetate (photoresists - multiple vendors)
- hexamethyldisilazane
- freon TE
- ethyl alcohol
- 1,2,4-trichlorobenzene (712-D stripper)
- freon R-22

* Replaced TCE in June 1979

Gases:

- ammonia
- arsine
- nitrogen
- helium
- oxygen
- phosphine
- argon
- tetrafluormethane
- hydrogen chloride
- silane
- nitrous oxide

Acids:

- acetic acid
- hydrochloric acid
- hydrofluoric acid
- nitric acid
- phosphoric acid
- sulfuric acid
- chromic acid (RT-2 stripper)

Miscellaneous Chemicals:

- boron tribromide
- phosophorous oxychloride
- ammonium hydroxide
- ammonium fluoride
- hydrogen peroxide
- sodium hydroxide
- sodium hydroxide (developer)
- aluminium pellets and wire
- gold spatter and slugs
- sodium hexametaphosphate

CHEMICAL USAGE JUNE 1983 TO JUNE 1984

- isopropanol
- m-pyrol
- acetone

ATTACHMENT 4

List of chemicals used at Intel Mountain View for 1975, 1978, 1979, and June 1983 through June 1984

CHEMICAL USAGE - INTEL MOUNTAIN VIEW

CHEMICAL	UNITS	1975	1978	1979 APR-DEC	JUNE 83-JUNE 84
Acetic Acid	Gallon	1,169	1,520	1,033	0
Acetone	Gallon	264	917	562	120
Alum Powder	Pounds	0	0	400	0
Ammonium Fluoride	Gallon	4,564	1,899	904	0
Ammonium Fluoride (50:1)	Gallon	0	0	0	0
Ammonium Hydroxide	Gallon	0	3	0	0
Arsenic Solution (1%)	Gallon	0	380	0	0
Boron Tribromide	25 gm Ampule	44	0	0	0
n-Butyl Acetate	Drum	62	169	153	0
Developer AZ 303	Gallon	0	300	246	0
Developer Hunt	Drum	44	14	180	0
Developer KTI	Drum	0	527	715	0
Developer AZ 351	Gallon	0	0	57	0
Ethylene Glycol	Gallon	0	4	9	0
Freon TF	Gallon	0	0	0	0
Gold Sputter	gms	0	0	1,380	0
Hydrochloric Acid	Gallon	537	812	699	0
Hydrofluoric Acid	Gallon	3,107	4,312	2,587	0
Hydrogen Peroxide	Gallon	6,852	11,232	5,815	0
Isopropanol	Gallon	1,320	3,913	3,731	120
Methanol	Gallon	1,101	30	36	0
m-Pyrol	Gallon	0	0	0	120
Nitric Acid	Gallon	1,291	2,142	1,340	0
Passivation Etch (layer pad)	Gallon	0	116	756	0
Phosphoric Acid	Gallon	664	1,013	821	0
Phosphoric Oxychloride	50 gm Ampule	669	646	469	0
Phosphorus Monitor (1:50)	Gallon	0	0	24	0
Premix KT1-6:1 Etch	Gallon	0	720	1,717	0
Premix Oxide KT1	Gallon	0	872	0	0
Primer (Hexamethlydsisilzine)	Gallon	0	33	9	0
2-Propanol	Gallon	0	0	1,720	0
Resist AZ 111	Gallon	0	249	0	0
Resist AZ 1370	Gallon	0	0	9	0
Resist Kodak 747	Gallon	49	1,022	833	0
Resist Waycoat IC	Gallon	236	0	0	0
Resist Waycoat SC	Gallon	17	0	0	0
Resist Waycoat SC 180	Gallon	36	138	0	0
Resist HR 100 or HR 200	Gallon	96	0	0	0
Sodium Hydroxide	Gallon	177	230	211	0
Stripper #4	Gallon	0	426	878	0
Stripper - RT1	Gallon	2,116	1,534	0	0
Stripper - RT2	Gallon	0	0	149	0
Sulfuric Acid	Gallon	8,403	12,210	8,800	0
Trichloroethylene	Gallon	782	464	0	0
1,1,1-Trichloroethane	Gallon	0	0	55	0
Xylene	Gallon	1,029	304	75	0

ATTACHMENT 5

Summary of Waste Disposition and Containment

for Intel Mountain View

SUMMARY OF WASTE DISPOSITION AND CONTAINMENT FOR INTEL MOUNTAIN VIEW

1. Bulk waste solvent - Selected manufacturing operations were piped directly to an underground waste solvent tank from January 1973 until 1981. The majority of the solvents collected were non-halogenated. The bulk solvent tank was a 1,250 gallon lined steel tank which was located below grade in a concrete vault. The following company was used for approximately seven years to haul solvent to Romic Chemical Corporation of East Palo Alto, California for recycle. The hauler was:

   Valley Industrial Pumping
   P. O. Box 6
   75 East Trimble Road
   Milpitas, California 95305

2. Drummed solvents - Selected manufacturing operations were constructed to collect spent solvents. These spent solvents were placed in 55 gallon drums and shipped to Romic Chemical Corporation for recycle. These would typically include spent photoresist, xylene, n-butyl acetate, freons and negative developers.

3. Miscellaneous drummed waste - Miscellaneous waste such as arsenic contaminated materials, minor spill clean up activities from inside the fabrication building (neutralized and adsorbed in vermiculite) were bagged in polyethylene liners and placed in steel drums. All miscellaneous waste were transported to a Class I landfill.

4. Acid waste and rinse waters - The acidic wastewaters from the manufacturing process were discharged through piping to an on-site waste water pre-treatment system. This pre-treatment system neutralized the wastewaters and discharged to the Mountain View sewerage system.

ATTACHMENT 6

List of Knowledgeable Personnel

LIST OF KNOWLEDGEABLE PERSONNEL

INTEL EMPLOYEES

NAME	CURRENT TITLE	POSITION AT MT. VIEW FACILITY
Gene Flath	Vice President	(Fab Manager)
Tom Rowe		(Fab Manager)
Tom Hartman	Manager-Die Production Equipment & Capacity	
Dick Olsen	Facilities Manager	(Facilities Supervisor)
Chet Palmer	Equipment Engineering Services Manager	(Facilities Manager)
Larry Borgman	Corporate Facilities/ Planning Manager	
Bryan Rector	Environmental Engineer	Project Manager since Oct. 81

The above can be contacted as follows:

Intel Corporation
3065 Bowers Avenue
Santa Clara, CA 95051
(408) 987-8080

NON-INTEL EMPLOYEES (Consultants on groundwater investigation and/or mitigation plan)

Consultants - Bob Sterrett
(formerly with Woodward-Clyde and IT)
C/O The Mark Group
Hookston Square, Suite 120
3480 Buskirk Avenue
Pleasant Hill, CA 94523
(415) 946-1055

Richard Weiss
C/O Weiss Associates
2054 University Avenue, Suite 301
Berkeley, CA 94704
(415) 644-3281

Mohsen Mehran
(formerly with D'Appolonia)
C/O IT Corporation
17500 Red Hill Avenue, Suite 100
Irvine, CA 92714
(714) 261-6441

Don Andres
C/O EMCON
90 Archers Street
San Jose, CA 95112
(408) 275-1444

ATTACHMENT 7

Summary of Insurance Policies

INTEL RISK MANAGEMENT REPORT - EPA REPORT

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
PROPERTY	08/13/68	08/01/73	MFB Mutual Ins. Co.	60219	No Specific coverages No Specific exclusions
PROPERTY	03/01/77	03/01/80	Allendale	83677	No specific coverages No specific exclusions
PROPERTY	03/01/80	06/01/81	National Union Fire	IMB 455-7210	No specific coverages No specific exclusions
PROPERTY	06/01/81	06/01/84	National Union Fire	IMB 456-0340	No specific coverage No specific exclusions
PROPERTY	06/01/83	06/01/86	St. Paul Fire & Marine	FL18454	No specific coverage No specific exclusions (from 6/1/83 to 6/1/84 coverage included premises clean-up mandated by your agency)
PROPERTY EXCESS	06/01/81	06/01/83	Fireman's Fund	XSP-1339587	No specific coverage No specific exclusions

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
PROPERTY EXCESS	09/10/81	06/01/82	INA	CN 10X928	No specific coverage No specific exclusions
DIC	01/01/75	01/01/78	Appalachian Ins Co.	22244	- No Specific Exlusions
DIC	04/01/78	08/08/79	Bellefonte Underwriters	IM 303135	- Excludes Contamination & Escape of Chemical Refrigerant or Lubricant
DIC	04/01/78	03/01/79	Motor Vehicle Casualty Co.	F 10-46-91	- Excludes Contamination - Escape of Chemical Lubricant or Refrigerant
DIC	04/01/78	03/01/79	Lexington Ins. Co.	IF 860-95-14	- No Specific Exclusions
DIC	04/01/78	08/08/79	Northbrook Ins. Co.	63-504-147	- Excludes Contamination

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
DIC	04/01/78	03/01/81	Appalachian	C-4731	- Excludes Contamination
DIC	03/01/79	03/01/80	Applalachian	64204	No specific coverages No specific exclusions
DIC	03/01/79	03/01/82	Motor Vehicle Casualty Co.	IM-10-87-40	- Excludes Contamination
DIC	03/01/79	03/01/82	Lexington Ins.Co.	IF 861-5373	- No Specific Exclusions
DIC	08/08/79	03/01/82	Covenant Mutual Ins. Co.	CIM 500 314	- No Specific Exclusions

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
DIC	08/08/79	03/01/82	Allianz	MS 0090 67	- No specific exclusions
DIC	08/08/79	03/01/82	Northbrook Excess & Surplus Co	63-505-522	- Excludes Contamination
DIC	09/18/81	06/01/83	Protective Natl. Ins. Co.Omaha	IM 180-40-41	No specific coverages No specific exclusions
DIC	09/18/81	06/02/83	American Centenniel Ins.	SP 002420	No specific coverages No specific exclusions
DIC	09/18/81	06/01/83	Transport Indemnity Co.	TIM 750277	No specific coverages No specific exclusions
DIC	09/18/81	06/02/83	Northbrook Ins. Co.	63-507-521	No specific coverages No specific exclusions

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
DIC	09/18/81	06/02/83	Transit Casualty	70-00-75	No specific coverages No specific exclusions
CGL	01/01/75	04/01/76	Fireman's Fund	MXP 2640840	-- Gradual Pollution Excluded -- Sudden & Accidental Pollution Incidents are covered
CGL	04/01/76	04/01/77	Hartford Accident & Indemnity	57 C 234381	- Gradual Pollution Excluded - Sudden & Accidental Pollution Incidents are covered
CGL	04/01/77	04/01/78	Pacific Indemnity Company	(78)71115623	Sudden & Accidental Pollution is covered.
CGL	04/01/77	04/01/78	Hartford Accident & Indemnity	57 C 236846 E	- Gradual Pollution Excluded - Sudden & Accidental Pollution incidents are covered
CGL	04/01/78	04/01/79	Hartford Accident & Indemnity	57 C 242257	- Gradual Pollution Excluded

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
					- Sudden & Accidental Pollution Incidents are covered
CGL	04/01/79	04/01/80	Hartford Accident & Indemnity	57 C 245425	- Gradual Pollution Excluded - Sudden & Accidental pollution incidents are covered
CGL	04/01/81	04/01/82	Hartford Accident & Indemnity	57CMC 0230E	- Gradual Pollution Excluded - Sudden & Accidental pollution incidents are covered
CGL	04/01/83	04/01/85	Federal Insurance Co.	6LF 7308-27-02	- Gradual pollution excluded - Sudden & accidental pollution incidents are covered
CGL	04/01/85	04/01/86	Federal Insurance Co.	6AP 7308-27-02	- Gradual and Sudden Accidental coverages are excluded
EXCESS LIABILITY	08/12/68	08/12/71	CNA	900-63-90	Follows Form of Primary

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	08/12/71	08/12/74	CNA Ins. Co.	RDV-888-75-61	Follows Form
EXCESS LIABILITY	03/01/74	01/01/77	Ins. Co. of State of Pennsyl.	4174-5894	Follows Form
EXCESS LIABILITY	03/01/74	01/01/77	Yosemite Ins. Co.	YXL 106480	Follows Form
EXCESS LIABILITY	03/01/74	01/01/77	Midland Ins.Co.	1112170197745	Follows Form
EXCESS LIABILITY	08/12/74	01/01/77	CNA Ins.	146-72-54	Follows Form of Primary
EXCESS LIABILITY	08/05/75	01/01/77	Applachian Ins. Co.	XL 72036	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	08/05/75	01/01/77	American Reinsurance Co.	M1041412	Follows Form
EXCESS LIABILITY	08/05/75	01/01/77	Employers Reins. Corp.	PLE-20772	Follows Form
EXCESS LIABILITY	01/01/76	01/01/77	Home Insurance Co.	HEC 4-49-57-38	Follows Form
EXCESS LIABILITY	01/01/77	04/01/78	CNA	RDV-336-78-18	Follows Form of Primary
EXCESS LIABILITY	01/01/77	04/01/77	Federal Ins. Co.	79222154	Follows Form

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	01/01/77	04/01/77	Ins. Co. State of Pennsylvania	4177-7495	Follows Form
EXCESS LIABILITY	01/01/77	04/01/77	Home Insurance Co.	HEC 4-49-57-61	Follows Form
EXCESS LIABILITY	01/18/77	04/01/77	Employers ReIns. Corp.	PLE-21218	Follows Form
EXCESS LIABILITY	02/01/77	07/01/78	Columbia Casualty	RDX 3651861	Follows Form
EXCESS LIABILITY	04/01/77	04/01/78	Home Ins. Co.	HEC 4-49-57-65	Follows Form
EXCESS LIABILITY	04/01/77	04/01/78	Columbia Casualty	RDX 3652384	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/77	04/01/78	Harbor Ins. Co.	52986	Coverage for BI/PD Caused by Gradual or Sudden Incidents, Excluded Clean Up Costs for Sudden & Accidental Incidents, Covered
EXCESS LIABILITY	04/01/77	04/01/78	Federal Insurance Co.	(78)79222156	Follows Form
EXCESS LIABILITY	04/01/77	04/01/78	Home Insurance Company	HEC 9344883	Follows Form of Primary
EXCESS LIABILITY	04/01/77	04/01/78	Ins. Co. of State,Pennsylvania	4177-7713	Follows Form
EXCESS LIABILITY	05/16/77	05/16/78	Employers Reins. Corp.	FLE-21286	Follows Form of Primary
EXCESS LIABILITY	05/16/77	05/16/78	First State Ins. Co.	935050	Follows Form of Primary

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/78	04/01/79	City Ins. Co.	HEC 9-80-11-55	Follows Form of Primary
EXCESS LIABILITY	04/01/78	04/01/79	CNA	142-35-71	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	Granite State Ins. Co.	6178-0097	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	City Ins. Company	HEC 9-69-39-76	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	Federal Ins. Co.	79222163	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/78	04/01/79	CNA	RDX 416-91-99	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	First State Insurance	926315	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	Motor Vehicle Casualty	M2 04 63-22	Follows Form
EXCESS LIABILITY	04/01/78	04/01/79	Lloyds	IW 32070	BI/PD Caused by Sudden and Accidental Incidents
EXCESS LIABILITY	04/01/79	04/01/80	Lloyds	IW 32192	Same as above (IW 32070)
EXCESS LIABILITY	04/01/79	04/01/80	City Insurance Co.	HEC 9801717	Follows Form of Primary

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/79	04/01/80	Granite State Ins.	6179-1193	Follows Form
EXCESS LIABILITY	04/01/79	04/01/80	City Ins. Co.	HEC 9-69-48-22	Follows Form
EXCESS LIABILITY	04/01/79	04/01/80	Granite State	6179-1196	Follows Form
EXCESS LIABILITY	04/01/79	04/01/80	Granite State	6179-1196(79-80	Follows Form
EXCESS LIABILITY	04/01/79	04/01/80	New England Reins.	791252	Follows Form
EXCESS LIABILITY	04/01/79	04/01/80	CNA	416-96-05-B	Follows Form

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/79	04/01/80	Lloyds	IW-32070 (79-80	BI/PD Caused by Sudden & Accdl Incidents, Excluded Fines, Penalties,Punitive or exemplary damages,Excluded Clean Up Costs due to Sudden & Accidental Incidents, covered.
EXCESS LIABILITY	05/24/79	07/24/79	Lloyds	30796	BI/PD Caused by Sudden & Accidental Incidents,Excluded Clean up costs due to Sudden & Accidental Incidents,Covered Fines, Penalties, Punitive or exemplary damages are not covered.
EXCESS LIABILITY	04/01/80	04/01/83	Central Natl. Ins. of Omaha	CNV 03-63-03	Follows Form of Primary Policy
EXCESS LIABILITY	04/01/80	04/01/81	Fireman's Fund	XLX 136 9598	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Federal Ins. Co.	7935-29-66	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/80	04/01/81	Chicago Ins. Co.	2-55-0033070	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Comstock Ins. Co.	201-202-922	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Northstar Reins. Corp.	NSX 19860	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Covenant Mutual Ins. Co.	XS 1512	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Puritan Ins. Co.	ML 65 29 35	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Transcontinental Ins. Co.	RDX 282-02-37	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/80	04/01/81	New England Re-Insurance Corp	791293	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Granite State Ins. Co.	6180-2118	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Mission Ins. Co.	M860077(80-81)	Follows Form
EXCESS LIABILITY	04/01/80	04/01/81	Associated Intl. Ins.	AEL 051079(80-1	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Midland Ins. Co.	XL 723945	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/81	04/01/82	Northbrook Excess & Surplus Co	63-007903	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Commercial Union	CY 9508-014	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Lexington Ins. Co.	5521077	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	INA	XCP 143897	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	AETNA C & S	OBXN 174 WCA	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Evanston Ins. Co.	EX 10594	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/81	04/01/82	Hartford A & I	83XS 102124	Follows Form
EXCESS LIABILITY	04/01/81	04/02/82	Central Natl. Ins. Co. Omaha	CNU03-63-03	Follows Form of Primary
EXCESS LIABILITY	04/01/81	04/01/82	Granite State	61812967	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Mission Ins. Co.	M860077	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Transcontinental	RDX2820343	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	New England Re-Ins Corp.	791622	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/81	04/01/82	Chicago Ins. Co.	255-U-032355	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Federal Ins. Co.	79352966	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Old Republic Ins.	OZX 12429	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	American Excess	EUL 5074300	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Associated Intl. Ins.	AEL 051079	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/81	04/01/82	Fireman's Fund	XLX 1369564	Follows Form
EXCESS LIABILITY	04/01/81	04/01/82	Continental Casualty	RDX 2823846	Follows Form
EXCESS LIABILITY	04/01/82	04/02/82	Highlands Ins. Co.	SR40677	Follows Form
EXCESS LIABILITY	04/01/82	04/01/82	Continental Ins. Co.	LX3196734	Follows Form
EXCESS LIABILITY	04/01/82	04/01/82	Harbor Ins. Co.	HI-149650	Follows Form
EXCESS LIABILITY	04/01/82	04/01/82	Covenant Mutual	XS 1526	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/83	04/01/84	Mission National	MN 017511	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	American Alliance Co.	AX 02-02-54	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Lexington Ins. Co.	5525091	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Federal Ins. Co.	84-7935-29-66	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Continental Ins. Co.	SRX 2101409	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Safety Mutual Casualty Group	XGL-524-CA	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/83	04/01/84	Highlands Ins. Co.	SR30309	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Hartford	57XS 102732	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Federal Ins. Co.	84-95216254	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Fireman's Fund	XLX 148-27-83	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	INS Special Risk	XCP 145512	Follows Form

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/83	04/01/84	Granite State	6183-4232	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	CNA	RDX 042135049	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Covenant Ins. Co.	XS 1919	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Pinetop Ins. Co.	GGU 100153	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Midland Ins. Co.	XL 724823	Follows Form
EXCESS LIABILITY	04/01/83	04/01/84	Evanston Ins. Co.	EX 11164	Follows Form

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/84	04/01/85	First State Ins. Co.	EU 000001	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	First State Ins. Co.	EU 000002	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Allianz	AUX 5201575	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	New England Ins. Co.	NE 000063	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Federal Ins. Co.	85 95216254	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EXCESS LIABILITY	04/01/84	04/01/85	CNA	5 RDX 042135049	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Safety Mutual Casualty Corp.	UF 1789	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	INA Special Risk	XCP 156110	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Highlands Ins. Co.	SR 30392	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Pinetop Ins. Co.	GGV 100406	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Federal Ins. Co.	85-95221 6254-2	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/84	04/01/85	Fireman's Fund	XLV 148-27-83	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Granite State Ins. Co.	6184-4323	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Mission National Ins. Co.	MN 029130	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Midland Ins. Co.	XL 724883	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Evanston Ins. Co.	EX 11368	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Lexington Ins. Co.	5526511	Follows Form

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/84	04/01/85	Harbor Ins. Co.	HI 163690	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Chicago Ins. Co.	5500036962	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Royal Insurance Co.	ED 102731	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Century Indemnity	CIU 549045	Follows Form of Primary Policy
EXCESS LIABILITY	04/01/84	04/01/85	Federal Ins. Co.	85-95221 6254	Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Environmental Liability Coverage
EXCESS LIABILITY	04/01/84	04/01/85	Chubb Group	85-7935-29-66	Follows Form
EXCESS LIABILITY	04/01/84	04/01/85	Transamerica	USE 1339-7753	Follows Form
EIL	01/06/82	01/06/83	International Ins. Co.	70013 -	- Lloyds Form - Claims made Policy - Covers third party claims due to personal injury/ property damage - Includes necessary clean up costs - Excludes Sudden Occurrences
EIL	01/06/83	04/01/84	Federal Insurance Co.	GLP 7308-2701	- Claims Made Policy - Covers 3rd Party Claims, Bodily Injury /Property damage - Covers Reasonable & necessary clean up costs
EIL	04/01/84	04/01/85	Federal Insurance Company	GLP-7308-27-01	- Claims Made Policy - Covers 3rd Party Claims for BL/PD - Covers reasonable & necessary clean up costs - Excludes Sudden & Accidental
EIL EXCESS	01/06/83	04/01/84	Pacific Insurance Co.	PI-019915	- Follows Form

In Order by Policy Type, Effective Dates

Policy Type	Effective Dates Start	End	Insurance Company	Policy #	Comments on Envirnmental Liability Coverage
EIL EXCESS	04/01/84	01/28/85	Gibraltar Casualty Co.	GMX-02633	- Follows Form
EIL EXCESS	04/01/84	04/01/85	Pacific Insurance Co.	PI-020092	- Follows Form
EIL EXCESS	04/01/85	04/01/86	St. Paul Surplus	SWD-5500302	- Claims made policy - No Gradual Coverage for Santa Clara / Livermore - Includes Sudden & Accidental

ATTACHMENT 8

Permits, Manifest and Other

Documents

October 13, 1983

Mr. Russ Frazer
Engineering Assistant, Water Division
City of Mountain View
231 N. Whisman Rd.
Mountain View, CA 94040

Dear Sir,

Intel discontinued the use of the Intel Mountain View facility as a fabrication plant in December, 1980. Until recently, the building has remained vacant.

In June, 1983, Intel began using the building as a test facility for semiconductors. This type of operation does not involve significant chemical usage.

By November, 1983, Intel plans to start a wafer sort operation at this facility. This operation requires the cleaning of silicon wafers with M-PYROL (as a degreasing agent) and subsequent rinsing.

The M-PYROL baths will be disposed of via 55 gallon steel drums. The carry-over of M-PYROL on the wafers will result in small amounts of M-PYROL being rinsed down a sanitary drain.

Intel is requesting an Industrial Waste Discharge Permit for this one operation.

Thank you for your time and consideration in this matter. If you have any comments or questions, please contact this office at (408) 987-6998.

Sincerely,

Bryan M. Rector
California Facilities Engineering
Environmental Specialist

cc: B. Sherman
M. Chang
N. Lougee - City of Mountain View

CITY OF MOUNTAIN VIEW

APPLICATION FOR INDUSTRIAL WASTES DISCHARGE PERMIT

Date October 13, 1983 No. _____

A. Name or Organization INTEL MOUNTAIN VIEW TEST FACILITY

Address 365 East Middlefield Rd., Mtn. View, CA (408) 987-6998

Address of Point of Discharge Same as above (415) 969-1838

Telephone #

Individual Responsible for Industrial Waste — Name Bryan M. Rector

Signature [signature]

Attach Map Showing Point of Discharge, Sampling Points, and Waste Treatment Facility

B. Flow Rate: Average <500 gals/day Max. <1000 gals/day Peak Hourly <10 GPM

C. Submit separate statement:

1. Detailing type of industry and nature of products
2. Listing chemicals used and approximate concentrations
3. Describing waste treatment facilities
4. Giving characteristics of exceptional industrial wastes
5. Concerning radioactive wastes
6. Naming organic solvents discharged and concentration at point of discharge

D. Indicate the point of discharge concentration of the following characteristics and mass emission rates where applicable. * See Attached.

Biochemical oxygen demand (B.O.D.)	_____	mg/l	Grease and oil, total	_____	mg/l
Chemical oxygen demand (C.O.D.)	_____	mg/l	Hydrogen Ion content pH	≤6.8	
Total Solids, Average	_____	mg/l	Fluoride	0	mg/l
Suspended Solids, Average	0	mg/l	Temperature	≤ 65	°F

	Max. Conc. Allowable mg/l	Allowable Mass Emission Rate kg/day		Max. Conc. Allowable mg/l	Allowable Mass Emission Rate kg/day
Arsenic			Cyanides		
Barium			Formaldehyde		
Beryllium			Lead		
Boron			Manganese		
Cadmium			Mercury		
Chromium Hexavalent			Nickel		
Chromium Total			Phenols		
Cobalt			Selenium		
Copper			Silver		
Cresols			Zinc		

NOT TO BE COMPLETED BY APPLICANT

Permit to Discharge Industrial Wastes in Accordance with This Application Subject to Attached General and Specific Conditions

_____ _____

Maintenance Director Date

Permit to Discharge Exceptional Industrial Waste Approved

List Details:

_____ _____

Maintenance Director Date

MD-6A (1-83) DIST: Original - File; Copy - Discharger; Copy - Water Quality Control Plant

INTEL INDUSTRIAL WASTE DISCHARGE PERMIT

ATTACHMENT 1

C.

1. The industry is semiconductor, SIC #3674.

2. M-PYROL (N-Methylpyrrolidone). See attached Material Safety Data Sheets.

3. The previous acid neutralization system was removed from this site in December 1981; therefore, there is no waste treatment system for this waste stream.

4. See attached Material Safety Data Sheets and the GAF Corporation specifications.

5. Not applicable.

6. N-Methylpyrrolidone (M-PYROL). The estimated volume of M-PYROL that will be rinsed down the sanitary drain is:

   7000 wafers/month ÷ 30 wafers/BOAT X 10 ML M-PYROL/BOAT

   = 2333 ml/mo. = 0.62 gal. M-PYROL/14,000 Gal. water = 44.3PPM*

   * Once operations start grab/composite sampling will be started to confirm this estimate.

   No other chemicals are expected in this waste water stream.

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

3/80

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
GAF CORPORATION	(201) 628-3869
ADDRESS (Number, Street, City, State, and ZIP Code) 140 West 51st Street, New York, NY 10020	
CHEMICAL NAME AND SYNONYMS N-Methylpyrrolidone	TRADE NAME AND SYNONYMS M-Pyrol ®
CHEMICAL FAMILY Cyclic Amide	FORMULA C_5H_9NO MW-99

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Section II - Not Applicable		

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	395°F	SPECIFIC GRAVITY (H_2O=1)	1.027
VAPOR PRESSURE (mm Hg.) @ 70°F less	than 1 mm	PERCENT, VOLATILE BY VOLUME (%)	100%
VAPOR DENSITY (AIR=1)	----	EVAPORATION RATE (Bu. Acet. =1)	Slower
SOLUBILITY IN WATER	Miscible		
APPEARANCE AND ODOR	Water-like/Slight amine odor		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	199°F (CC/PM)/204°F(OC)	FLAMMABLE LIMITS	Lel 0.9	Uel 3.9
EXTINGUISHING MEDIA	Water, Dry Chemical or CO_2			
SPECIAL FIRE FIGHTING PROCEDURES	None			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None			

(Continued on reverse side)

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: (none established) 200 ppm (estimated)

EFFECTS OF OVEREXPOSURE: Causes eye irritation or burns; continued or repeated skin contact may cause skin irritation.

EMERGENCY AND FIRST AID PROCEDURES: In case of eye contact, immediately flush with plenty of water for at least 15 minutes. Call a physician. For skin contact, wash with soap and water.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID: None
	STABLE	X	

INCOMPATIBILITY *(Materials to avoid)*: Strong Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID: None
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Soak up with earth, sand or similar material and dispose of in accordance with local, state, and federal regulations.

WASTE DISPOSAL METHOD: Dispose of with liquid waste in accordance with local, state, and federal regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION *(Specify type)*: None Required

VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL *(General)*: Satisfactory	OTHER

PROTECTIVE GLOVES: Rubber or Neoprene	EYE PROTECTION: Safety Goggles

OTHER PROTECTIVE EQUIPMENT: None

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid contact with eyes. Wash thoroughly after handling.

OTHER PRECAUTIONS: Keep away from heat and open flames.

GAF
CORPORATION
140 West 51 Street
New York NY 10020
212 582 7600

M-PYROL

SPECIFICATIONS

Chemical Description:

N-Methyl-2-Pyrrolidone

Physical Specifications:

State @ 25°C.:	Liquid
Color (APHA): (Darkens with Age & Temperature)	50 Maximum At time of production

Chemical Specifications:

Purity (VPC): (as area %)	99.5% Minimum
Moisture: (Infrared)	0.05% Maximum

This product may be subject to deterioration 6 months after production.

SOS

GAF CORPORATION 1361 Alps Road Wayne NJ 07470 201 628 3000

SUGGESTED HANDLING PROCEDURES

N-METHYL-2-PYRROLIDONE

Toxicity and Precautions

Methyl Pyrrolidone is of a low order of toxicity but must not be taken internally. The acute toxicity expressed as the LD_{50} for white rats is 4.2 gm/kg. Although human patch tests indicate the material is mild to the skin, experience over many years has included reports of skin effects, ordinarily associated with continued or repeated gross contact with M-Pyrol such as might be associated with washing by hand of metal or other parts in open containers of the solvent. Based on this experience, repeated or prolonged skin contact should be avoided. It does not appear to be a sensitizing agent. It is a severe eye irritant.

Inhalation tests indicate no special hazard. The vapor pressure or volatility of this product at room temperature is very low thus minimizing the chance of exposure by inhalation. Normal good practices for handling all chemicals to avoid any unnecessary exposure should be followed. This includes wearing of safety glasses and washing off with plenty of water any material which accidentally contacts the skin and in particular, the eyes.

Properties

Methyl Pyrrolidone is essentially non-corrosive. It is a very stable chemical under normal conditions. The product is almost colorless (APHA color 50 max.) with a mild amine-like odor. It boils at 395°F (202°C), freezes at -12°F (-24.4°C), and has a closed cup flash point of 190°F (88°C). Methyl Pyrrolidone is completely miscible with water and most organic solvents, including alcohols, ethers, ketones, aromatic and chlorinated hydrocarbons, and vegetable oils.

Shipments

Methyl Pyrrolidone is available in tank car or tank trailer quantities and also in various size drums. Shipping containers are normally of unlined plain steel construction. Tank cars are not normally equipped with heating coils. Heating is not required except when product is subjected to temperatures below 10°F (-12.2°C).

For bulk unloading and product transfer plain steel centrifugal pumps of suitable capacity are satisfactory. Rubber hose should not be used for handling Methyl Pyrrolidone. Standard steel pipe or braided steel hose is acceptable for transferring this chemical.

Materials of Construction

Ordinary carbon steel (6552 or 0550) is satisfactory for storing Methyl Pyrrolidone. Stainless steel 304 and 316, nickel and aluminum are also suitable.

"Teflon" polytetrafluoroethylene (DuPont), "Kalrez" (DuPont) Garlock asbestos and mild steel are suitable for gasketing materials.

Suggested Handling Procedures
N-Methyl-2-Pyrrolidone

Storage Precautions

Methyl Pyrrolidone is a stable compound but it is hygroscopic. Therefore, shipping and storage containers should be stored in a dry area, sheltered from the weather. It is also necessary to provide protective venting of containers during withdrawal to prevent the entry of moisture if delivered purity of product is to be maintained.

Closed storage tanks must be equipped with dessicant-filled breather pipes. In the case of the 55 gallon drum, a dessicant-filled tube should be fitted into the 3/4" vent atop the drum.

While Methyl Pyrrolidone is stable indefinitely, some discoloration may occur with long term storage.

Miscellaneous Handling Precautions

Although Methyl Pyrrolidone has a relatively high flash point (190°F by closed cup method) compared to many other solvents, its combustibility properties should be taken into consideration and suitable precautions observed in elevated temperature applications.

Moreover, when cleaning specially lined equipment and tank transport units, it must be definitely established that Methyl Pyrrolidone is not a solvent for the particular resin used in the coating.

GAF CORPORATION
1361 Alps Road
Wayne NJ 07470
201 628 3000

N-METHYLPYRROLIDONE (M-PYROL®)

SUMMARY OF TOXICITY INFORMATION

Acute Oral Toxicity

In a study using five groups of ten fasted albino rats (Sprague-Dawley; five males, five females) and a 14-day observation period after intubaation with graded doses, the approximate acute oral LD_{50} was calculated to be 4.2 ± 0.8 ml/kg. Based on this result, M-Pyrol may be classed as mildly to moderately toxic by ingestion.

Skin Irritation

In a repeated insult patch test using 50 human subjects, no irritation was produced during the first 24-hour exposure. However, through repeated and prolonged contact, some mild transient irritation reactions were noted, leading to the conclusion that it is a mild fatiguing agent. No evidence pointing to sensitization was noted.

In a modified Draize procedure using six albino rabbits, 0.5 ml portions of 100% M-Pyrol were applied occlusively to both abraded and non-abraded sites for 24 hours. Sites were scored at 24 and 72 hours and resulted in a calculated Primary Irritation Index of 0.5 (indicates very low potential for skin irritation).

Although the above tests indicate the material is mild to the skin, experience over many years has included reports of skin effects, ordinarily associated with continued or repeated gross contact with M-Pyrol such as might be associated with washing by hand of metal or other parts in open containers of the solvent. Based on this experience, repeated or prolonged skin contact should be avoided.

Due to the wide solvent properties of M-Pyrol, choice of protective glove material is restricted. From the solubility characteristics of M-Pyrol, it appears that gloves of polyolefin should be suitable although GAF has not had good experience to report. A neoprene glove, "Scorpio #8-352" (Edmont-Wilson Co., 1300 Walnut Street, Coshocton, OH 43812) has given good service and protection in GAF manufacturing and handling.

Acute Dermal Toxicity (skin absorption)

Tests on albino rabbits showed an Approximate Lethal Dose (ALD) for intact skin greater than 4 and less than 8 gm/kg. For abraded skin, the ALD was observed to be greater than 2 and less than 4 gm/kg.

Acute Dermal Toxicity (continued)

From this, M-Pyrol does not appear to be in the range ordinarily classified as toxic (for example; the Federal Hazardous Substances Act considers materials with an LD_{50} of 2 g/Kilo and less as toxic and requiring labeling).

Chronic Dermal Toxicity

A 20-day, sub-acute, dermal toxicity study, using rabbits, has been conducted using M-Pyrol at application levels of 0.4 and 0.8 ml per kilo of body weight per day. Both abraded and normal skin sites were included in the study. A mild local skin irritation was observed on repeated application. Blood studies, weight gain and final histopathological studies on major organs revealed no systemic effects attributable to the treatment. At a higher level of 1.6 ml per kilo per day, one of the four experimental animals (abraded skin) died. Observations on the others in this group were the same as those made at the lower dosage levels.

Inhalation Studies

In tests conducted on white rats exposed to methylpyrrolidone vapors for a single uninterrupted six-hour period, all animals survived the high concentrations studied. Under the most stringent conditions, air was bubbled through a reservoir of methylpyrrolidone held at 110°C and thence into the test chamber holding the animals. Supersaturation was evidenced by considerable condensation on the chamber walls. Close observation over the following two-week period showed no evidence of toxic effects.

Another test exposing 12 rats to air saturated at room temperature (about 1.5 mg methylpyrrolidone/liter) for 10 days (six hrs/day) gave similar results. In this experiment, gross and microscopic tissue examination was conducted to further observe that no incipient effects could be noted.

Eye Irritation

Methylpyrrolidone, 100% was tested in the right eye of each of six albino rabbits. The procedure and evaluation were according to that described in the regulations for the Federal Hazardous Substances Act. The material produced corneal opacity in four animals and conjunctivitis in all. In two of the rabbits, corneal effects persisted through the seven-day observation period. The conjunctivitis cleared before the end of this period in all but one test animal. M-Pyrol should be regarded as a severe eye irritant.

Mutagenicity

Mutagenicity potential was measured by the Ames Test using histidine auxotrophic strains of Salmonella typhimurium (TA-1535, TA-1537, TA-1538, TA-98, TA-100). Tests were conducted in all five strains both non-activated and activated (induced S-9 mouse liver preparation). Inhibition of growth of test strains was no problem even undiluted. No mutagenic activity was observed under any of the conditions used.

Dermal Teratology

Six groups of 25 pregnant female Sprague-Dawley rats received the following treatments on days 6 through 15 of gestation:

0.75 ml/kg b.w.	deionized water dermally	(negative control)
10 mg/kg b.w.	hexafluoroacetone dermally	(positive dermal control)
250 mg/kg b.w.	aspirin orally	(positive oral control)
75 mg/kg b.w.	N-Methylpyrrolidone dermally	(experimental low group)
237 mg/kg b.w.	N-Methylpyrrolidone dermally	(experimental mid group)
750 mg/kg b.w.	N-Methylpyrrolidone dermally	(experimental high group)

Treatment with NMP resulted in dose-dependent brightly colored yellow urine and dry skin. All animals were sacrificed on day 20 of gestation and uterine contents examined.

The control groups exhibited expected findings. No particular teratogenicity was noted in the negative (water-treated) control group. Frank teratogenic effects were noted in both the dermally and orally-treated positive control groups.

In the experimental groups, significantly lower dam weight gains and skeletal variations were observed at 750 mg NMP/kg b.w. These effects could be the result of maternal toxicity. Unequivocal teratogenic effects could not be defined. There was no evidence of teratogenic effects nor effects on the dams at 75 or 237 mg/kg.

Sub-acute 90-Day Feeding Studies, Rats and Mice

Wistar-derived rats: Four groups of 50 rats (25 male, 25 female) were fed diets containing levels of M-Pyrol as follows, for a period of 90 days.

Group	ppm in diet
1	0 (control)
2	800
3	2000
4	5000

Sub-acute 90-Day Feeding Studies, Rats and Mice (continued)

No gross or behavioral abnormalities in any of the test animals were observed which were of toxicological relevance. There were no gross toxic or pharmacologic effects noted, nor differences in survival. In organ weight and clinical examinations conducted at termination, various minor but statistically significant effects were noted among the test groups which included increased male thyroid weights (only in high test group); minor differences in final urine pH and specific gravity in females, not of toxicological significance; and SGPT enzyme value elevation in Group 3 males. There were no histopathological abnormalities observed attributable to the test diets. An EPA evaluation concluded that the no-effect level in male and female rats was 2000 ppm.

Charles River (CD-1) mice: Four groups of 60 mice (30 males, 30 females) were fed diets containing levels of M-Pyrol as follows, for a period of 90 days:

Group	ppm in diet
1	0 (control)
2	400
3	1000
4	2500

As in the rat study, daily observation, weight recording, clinical studies at 30 and 90 days, and complete gross and histopathological examination (24 organs) on all animals which died during the period or were sacrificed at 90 days were made. No survival rate differences were noted. No treatment-related pathological observations, gross or microscopic, were noted. Clinical (urine and blood) parameters were within normal limits at termination with the exception of slight dose-related serum chloride elevation. Somewhat depressed spleen weight was observed in females at the highest dosage. In males, this was noted at the two higher levels (1000 and 2500 ppm). No histopathologic changes were noted in the spleens, however, nor in any tissues examined. A conservative value for no-effect level from this study is 400 ppm (for males, 400 ppm; for females, 1000 ppm).

Sub-acute 90-Day Feeding Study in Beagle Dogs

Four groups of 12 beagle dogs (6 male, 6 female) were fed diets containing levels of M-Pyrol to achieve the following doses, expressed in mg M-Pyrol per kg of body weight. The material was fed for a total of 90 consecutive days.

Group	mg/kg
1	0 (control)
2	25
3	79
4	250

Sub-acute 90-Day Feeding Study in Beagle Dogs (continued)

Record-keeping included daily observations and weekly food consumption and body weights. Clinical studies were conducted initially, at four weeks, eight weeks and at termination. On sacrifice, complete gross and histopathological examinations (33 organs) were conducted.

During the 90-day period, no mortality was experienced and no statistically significant differences in body weight or food consumption among groups were noted. No gross signs of toxicity or behavioral abnormality were observed.

Clinical parameters were within normal ranges with the following exceptions. Blood cholesterol levels in males appeared to decrease with increasing dose. At the 12-week (final) period, the reduction in the high group of males was of statistical significance. In male dogs, serum total proteins and serum albumin were lower in mid and high groups (by 7% and 11% and 8% and 8% respectively). Also in male dogs, mean platelet counts increased with dosage at each clinical period, significant statistically versus controls in all experimental groups at week 8 and in the mid and high groups at week 12. Within each group, however, the difference between initial and final counts was not significant. Comparison of all the parameters specifically mentioned above with historical data for control dogs in the laboratory indicated no statistical difference. The increased platelet counts at termination correlated with increased megakaryocyte counts observed histologically in sternal marrow. The megakaryocyte counts, again, however, fall within the laboratory's normal historical range for controls.

Relative and absolute organ weights (10 organs) did not vary significantly among groups.

Gross and histological examination revealed no abnormalities related to the test material (for discussion of megakaryocyte observation, see above).

The conclusion of the performing laboratory is that no overt signs of toxic effects were noted at any level. No toxicologic significance is able to be ascribed to the platelet/megakaryocyte counts. An EPA evaluation tentatively assigns a conservative 25 mg/kg as the no-effect level, based on the increased platelet count in males.

Fish Toxicity

Static bioassays for acute LC_{50}, according to an EPA suggested procedure (1975), were conducted using bluegills (Lepomis machrochiris), fathead minnows (Pimephales promelas) and rainbow trout (Salmo gairdneri). The LC_{50} values obtained from these studies are given below:

Fish	Temp.	LC_{50} (96 hr)	Confidence Limits
Sunfish	22°C	832 mg/liter	(724-955)
Fathead minnow	22°C	1072 mg/liter	(912-1259)
Trout	12°C	3048 mg/liter	(2692-3388)

BAY AREA AIR POLLUTION CONTROL DISTRICT

July 7, 1976

Intel Corporation
P.O. Box 307
Santa Clara, Calif. 95051

Attention: Mr. William Osterhoudt
Application Number 15773
Registration Number 65773
Equipment Location: 365 E. Middlefield Rd.
Mtn. View, Ca.

Gentlemen:

Attached is your Permit to Operate the equipment covered by the above registration number. This Permit should be posted on or near the equipment to be operated and should be clearly visible and accessible. If the equipment is so constructed that the Permit cannot be placed on it, it should be mounted within 25 feet of the equipemnt and be clearly visible.

If the operation of this equipment causes the emission of air contaminants in violation of any regulation of the Control District, this Permit will be revoked. Operation of this equipment in violation of District regulations or while the Permit is revoked is subject to penalty action. Contact the Control District for instructions if the Permit is ever revoked.

If you have any questions contact the Permit Services Section of the Control District.

Very truly,

D. J. Callaghan
Air Pollution Control Officer

By James L. Tulloch
Permit Services Section

lb

Attachment: Permit No. 65773-1

BAY AREA AIR POLLUTION CONTROL DISTRICT

PERMIT

Registration Number 65773-1

PURSUANT TO THE AUTHORITY GRANTED UNDER THE RULES AND REGULATIONS FOR THE BAY AREA AIR POLLUTION CONTROL DISTRICT, THE

Intel Corporation

Name of corporation, company, individual, or governmental agency

LOCATED AT 365 E. Middlefield Road, Mtn. View, Calif.

address

IS HEREBY GRANTED A PERMIT TO USE OR OPERATE THE FOLLOWING ARTICLE, MACHINE, EQUIPMENT OR CONTRIVANCE:

Two (2) Epitaxial Reactors with Fum-A-Trol Fume Scrubber

This Permit does not authorize any violation of the Rules and Regulations of the Bay Area Air Pollution Control District or of Chapter 2.5 of the Health & Safety Code of the State of California.

D. J. CALLAGHAN
Air Pollution Control Officer

by James L. Tuthill
Permit Services Section

Date July 7, 1976

Form P-103
4/76 3M

3065 Bowers Avenue
Santa Clara, California 95051
(408) 987-8080
TWX - 910 338 0026 TELEX - 34-6372

July 23, 1980

EPA Region IX
A-3-2
215 Fremont Street
San Francisco, CA 94105

Dear Sir:

The following information is supplied in accordance with Section 3010 of the Resource Conservation and Recovery Act. The location in question is Fabrication Site I in Mountain View.

If you require further information please contact my office:

Intel Corp.
3065 Bowers Avenue
Santa Clara, CA 95051

M/S Oak - 1 - A621

Attn: Bryan M. Rector

Sincerely,

Bryan M. Rector
Facilities Engineering
Environmental Specialist

BR/bd

Please print or type with ELITE type *(12 characters/inch)* in the unshaded areas only.

Form Approved OMB No. 158-S79015
GSA No. 0246-EPA-OT

EPA

U.S. ENVIRONMENTAL PROTECTION AGENCY

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the INSTRUCTIONS FOR FILING NOTIFICATION before completing this form. The information requested herein is required by law *(Section 3010 of the Resource Conservation and Recovery Act)*.

INSTALLATION'S EPA I.D. NO.

I. NAME OF INSTALLATION

II. INSTALLATION MAILING ADDRESS

III. LOCATION OF INSTALLATION

PLEASE PLACE LABEL IN THIS SPACE

FOR OFFICIAL USE ONLY

COMMENTS

C

INSTALLATION'S EPA I.D. NUMBER	T/A C	APPROVED	DATE RECEIVED (yr., mo., & day)
F	1		

I. NAME OF INSTALLATION

INTEL CORPORATION MOUNTAIN VIEW CAMPUS

II. INSTALLATION MAILING ADDRESS

STREET OR P.O. BOX

3 3065 BOWERS AVE

CITY OR TOWN	ST.	ZIP CODE
4 SANTA CLARA	CA	95051

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER

5 365 MIDDLEFIELD ROAD

CITY OR TOWN	ST.	ZIP CODE
6 MOUNTAIN VIEW	CA	94043

IV. INSTALLATION CONTACT

NAME AND TITLE *(last, first, & job title)*	PHONE NO. *(area code & no.)*
2 PALMER CHET FACILITIES MANAGER	408-496-9002

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER

8 INTEL CORPORATION (PRIVATE CORPORATION)

B. TYPE OF OWNERSHIP *(enter the appropriate letter into box)*

F = FEDERAL
M = NON-FEDERAL

M

VI. TYPE OF HAZARDOUS WASTE ACTIVITY *(enter "X" in the appropriate box(es))*

- [X] A. GENERATION
- [ ] B. TRANSPORTATION *(complete item VII)*
- [ ] C. TREAT/STORE/DISPOSE
- [ ] D. UNDERGROUND INJECTION

VII. MODE OF TRANSPORTATION *(transporters only — enter "X" in the appropriate box(es))*

- [ ] A. AIR
- [ ] B. RAIL
- [ ] C. HIGHWAY
- [ ] D. WATER
- [ ] E. OTHER *(specify)*:

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

- [X] A. FIRST NOTIFICATION
- [ ] B. SUBSEQUENT NOTIFICATION *(complete item C)*

C. INSTALLATION'S EPA I.D. NO.

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

I.D. – FOR OFFICIAL USE ONLY

5														T/A	C
W															1
1	2											13	14	15	

IX. DESCRIPTION OF HAZARDOUS WASTES *(continued from front)*

A. HAZARDOUS WASTES FROM NON–SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.31 for each listed hazardous waste from non–specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
F001	F003	F005			
7	8	9	10	11	12

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four–digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four–digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
D007	P012	U044	U220	U154	U159
37	38	39	40	41	42
U211	U226	U239			
43	44	45	46	47	48

D. LISTED INFECTIOUS WASTES. Enter the four–digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54

E. CHARACTERISTICS OF NON–LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non–listed hazardous wastes your installation handles. *(See 40 CFR Parts 261.21 – 261.24.)*

- [X] 1. IGNITABLE (D001)
- [X] 2. CORROSIVE (D002)
- [ ] 3. REACTIVE (D003)
- [ ] 4. TOXIC (D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE *(type or print)*	DATE SIGNED
408- 987-6998 Bryan M Rector	Bryan M. Rector Corporate Environmental Specialist	7-23-80

INTERNAL CORRESPONDENCE

TO: Chet Palmer

DATE: October 24, 1980

FROM: Bryan Rector, OAK-1-621, Ext. 7-6998 BMR

SUBJECT: ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

CC:

This is the Fab I EPA HW number (CAD061620217). Please forward this number to the appropriate people in Fab I for completion of HW Manifests.

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER ➤ CAD061620217

INTEL CORPORATION
3065 POWERS AVE
SANTA CLARA CA 95051

INSTALLATION ADDRESS ➤ 365 MIDDLEFIELD RD
MOUNTAIN VIEW CA 94040

EPA Form 8700-12A (4-80)

BR/fmb

IF IA UI 'S IA IR

STATE WATER RESOURCES CONTROL BOARD
STATE DEPARTMENT OF HEALTH

See Disposal Site Tag # _____

PRODUCER OF WASTE (Must be filled by producer)

Name (print or type): Intel Corporation Code No.

Pick up Address: 365 Middlefield Road, Mountain View, CA
(Number) (Street) (City)

Telephone Number: (408) 987-8247 P.O. or Contract No.: A-00-36859-H

Order Placed By: Vince Suchoski Date: 2/28/80

Type of Process which Produced Wastes: Chemical Spill Code No.
(Examples: metal plating, equipment cleaning, oil drilling--wastewater treatment, pickling bath, petroleum refining)

DESCRIPTION OF WASTE (Must be filled by producer)

Check type of wastes:

1. ☒ Acid solution
2. ☐ Alkaline solution
3. ☐ Pesticides
4. ☐ Paint sludge
5. ☐ Solvent
6. ☐ Tetraethyl lead sludge
7. ☐ Chemical toilet wastes
8. ☐ Tank bottom sediment
9. ☐ Oil
10. ☐ Drilling mud
11. ☐ Contaminated soil and sand
12. ☐ Cannery waste
13. ☐ Latex waste
14. ☐ Mud and water
15. ☐ Brine

☒ Other (Specify) Dry waste Code No.

Components:
(Examples: Hydrochloric acid, lime, caustic soda, phenolics, solvents (list), metals (list), organics (list), cyanide)

	Concentration: Upper	Lower	%	ppm
1. Neutralized acid, gloves,				
2. suits, absorbent from a				
3. chemical spill				
4. Sand with a trace				
5. amount of Kodak				
6. Photodeveloper B				

Hazardous Properties of Waste:
pH _____ ☐ none ☒ toxic ☐ flammable ☒ corrosive ☐ explosive

Bulk Volume: _____ ☐ gal ☐ tons ☐ barrels (42 gal) ☐ other _____ (specify)

Containers: _____ (Number) ☐ drums ☒ cartons ☐ bags ☐ other _____ (specify)

Physical State: ☒ solid ☐ liquid ☐ sludge ☐ other _____ (specify)

Special Handling Instructions (if any): Wear gloves and safety glasses.

The waste is described to the best of my ability and it was delivered to a licensed liquid waste hauler (if applicable).

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

O.J. Suchoski
Signature of authorized agent and title

HAULER OF WASTE (Must be filled by hauler)

Name (print or type): SAFETY SPECIALISTS, INCORPORATED Code No.

Business Address: 3284 F Edward Avenue, Santa Clara, CA 95050
(Number) (Street) (City)

Telephone Number: (408) 988-1111 Pick Up: 2/28/80 (Date) Time: ___:___ ☐ am ☐ pm

State Liquid Waste Hauler's Registration No. (if applicable): 150

State Hazardous Waste Hauler's Registration No. (if applicable): 150

Job No.: _____ No. of Loads or Trips: _____ Unit No.: _____

Vehicle: ☐ vacuum truck ____ barrels, ☐ flatbed, ☒ other Van (specify)

The described waste was hauled by me to the disposal facility named below and was accepted.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Ken Wilkins
Signature of authorized agent and title

DISPOSER OF WASTE (Must be filled by disposer)

Name (print or type): WCC Landfill Code No.

Site Address: Foot of Parr Blvd., Richmond, CA

The hauler above delivered the described waste to this disposal facility and it was an acceptable material under the terms of RWQCB requirements, State Department of Health regulations, and local restrictions.

Quantity measured at site (if applicable): _____ State fee (if any): N/A

See Manifest Number _____

Handling Method(s):

☐ recovery

☐ treatment (specify): ~~Evaporation~~ Cell A, B Code No.
(Examples: incineration, neutralization, precipitation)

☒ disposal (specify): ☐ pond ☒ spreading ☐ landfill ☐ injection well
☐ other (specify): Class I Site Code No.

If waste is held for disposal elsewhere specify final location: _____

Disposal Date: _____

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Signature of authorized agent and title

The site operator shall submit a legible copy of each completed Record to the State Department of Health with monthly fee reports.

SAFETY SPECIALISTS, INCORPORATED
3284 F Edward Avenue, Santa Clara, CA 95050
Telephone (408) 988-1111

FOR INFORMATION RELATED TO SPILLS OR OTHER EMERGENCIES INVOLVING HAZARDOUS WASTE OR OTHER MATERIALS CALL (800) 424-9300.

DOT Proper Shipping Name 758

No. _____

white- SSI (license file) blue- SSI (customer file) green- disposal site (file) yellow- disposal site (State copy) pink- producer (file) gold- producer (State copy)

Revised December 1974

CALIFORNIA LIQUID WASTE HAULER RECORD

STATE WATER RESOURCES CONTROL BOARD
STATE DEPARTMENT OF HEALTH

PRODUCER OF WASTE (Must be filled by producer)

Name (print or type): INTEL Code No.

Pick up Address: 365 E. Middlefield Rd (Number) (Street) (City)

Telephone Number: ( ) 246-7501 P.O. or Contract No.:

Order Placed By: W. Osterhoudt Date: 9/26/75

Type of Process which Produced Wastes: Solvents Code No.
(Examples: metal plating, equipment cleaning, oil drilling--wastewater treatment, pickling bath, petroleum refining)

DESCRIPTION OF WASTE (Must be filled by producer)

Check type of wastes:

1. ☐ Acid solution
2. ☐ Alkaline solution
3. ☐ Pesticides
4. ☐ Paint sludge
5. ☒ Solvent
6. ☐ Tetraethyl lead sludge
7. ☐ Chemical toilet wastes
8. ☐ Tank bottom sediment
9. ☐ Oil
10. ☐ Drilling mud
11. ☐ Contaminated soil and sand
12. ☐ Cannery waste
13. ☐ Latex waste
14. ☐ Mud and water
15. ☐ Brine

☐ Other (Specify) Code No.

Components:
(Examples: Hydrochloric acid, lime, caustic soda, phenolics, solvents (list), metals (list), organics (list), cyanide)

	Concentration: Upper	Lower	%	ppm
1. Xylene	60	40	☒	☐
2. TCE			☐	☐
3. N-Butyl			☐	☐
4. WATER			☐	☐
5.			☐	☐
6.			☐	☐

Hazardous Properties of Waste:
pH ____ ☐ none ☒ toxic ☒ flammable ☐ corrosive ☐ explosive

Bulk Volume: 1000 ☐ gal ☐ tons ☐ barrels (42 gal) ☐ other (specify)

Containers: NONE (Number) ☐ drums ☐ cartons ☐ bags ☐ other (specify)

Physical State: ☐ solid ☐ liquid ☐ sludge ☐ other (specify)

Special Handling Instructions (if any): None

The waste is described to the best of my ability and it was delivered to a licensed liquid waste hauler (if applicable).

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Signature of authorized agent and title

HAULER OF WASTE (Must be filled by hauler)

Name (print or type): Valley Ind. Pumping Code No.

Business Address: P.O. Box 6135 San Jose (Number) (Street) (City)

Telephone Number: (408)-243-7920 Pick Up: 9-26-75 (Date) Time: : ☐ am ☐ pm

State Liquid Waste Hauler's Registration No. (if applicable): 01054

Job No.: ____ No. of Loads or Trips: ____ Unit No.: ____

Vehicle: ☒ vacuum truck 50 barrels, ☐ flatbed, ☐ other ____ (specify)

The described waste was hauled by me to the disposal facility named below and was accepted.

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Perry Mason
Signature of authorized agent and title

DISPOSER OF WASTE (Must be filled by disposer)

Name (print or type): Chem Service Code No.

Site Address: 1021 Burgess

The hauler above delivered the described waste to this disposal facility and it was an acceptable material under the terms of RWQCB requirements, State Department of Health regulations, and local restrictions.

Quantity measured at site (if applicable): 1000 State fee (if any): ____

Handling Method(s):

☐ recovery

☐ treatment (specify): Code No.
(Examples: incineration, neutralization, precipitation)

☐ disposal (specify): ☐ pond ☐ spreading ☐ landfill ☐ injection well

☒ other (specify): Code No.

If waste is held for disposal elsewhere specify final location: ____

Disposal Date: 9/26/75

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Signature of authorized agent and title

The site operator shall submit a legible copy of each completed Record to the State Department of Health with monthly fee reports.

FOR INFORMATION RELATED TO SPILLS OR OTHER EMERGENCIES INVOLVING HAZARDOUS WASTE OR OTHER MATERIALS CALL (800) 424-9300.